



Test Report

Vers.	Chap.	Description	Date
0		Initial version	13 Jun 00

E.U.T. : Breitling Emergency watch P/N E56121.1 S/N 0019 Standard : 47CFR87.139

Diffusion

Company	Breitling SA
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Distribution authorization

Date 13 June 2000

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Signature

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Tests performed by : Olivier Desjeux

Date : 13 June 2000

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1. Scope

Test of the Breitling Emergency watch against 47CFR87.139

The test results of this report relate exclusively to the EUT as described in chapter 5.

2. Definitions

The Breitling Emergency watch is considered as an ELT. As such, all further references and measurement results are against ELT characteristics.

3. Acronyms

EUT Equipment Under Test

ELT Emergency Locator Transmitter

4. Details of applicant

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5. Equipment Under Test

Equipment type	Multifunction watch with a miniature distress transmitter
Part Number	E56121 / E56121.1 / E56321.1
Manufacturer	Breitling SA
Serial Number	0019
Frequency	121.500 MHz / 70K0A3X
Number of channels	1
Antenna	Embedded dipole type. Radiating antenna 43cm, counterpoise 58cm
Power supply	2 x 3V Lithium batteries

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6. Test procedure

Test procedure : 47CFR2 Subpart N--FCC Procedure for Testing Class A, B and S Emergency Position Indicating Radiobeacons (EPIRBs)

Sec. 2.1515(b) Spectral measurements.

7. Test report

7.1. Summary

No deviations from the technical specifications were ascertained in the course of the tests performed. As such, the EUT is compliant with 47CFR87.139.

7.2. Instrumentation and equipment

Description	Reference	Serial Number
Spectrum Analyzer	HP141T - HP 8555A - HP8552B	120055
Frequencymeter	HP5340A	1724A04553
RF Generator	HP8657A	2750U00161
RX Antenna	Dipole 121.5 MHz 2dBi SWR1.2	Ant121.5M

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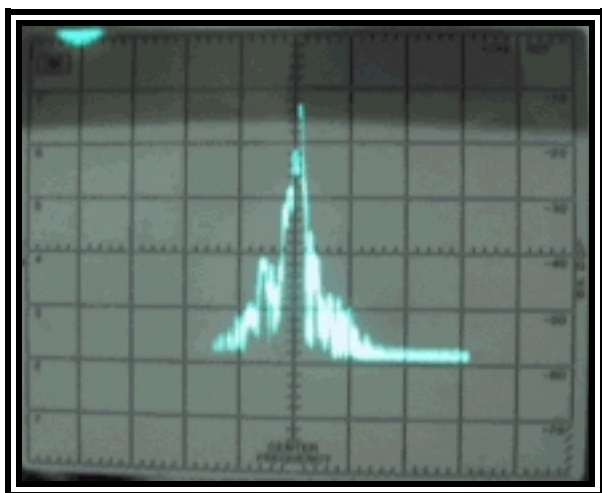
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7.3. Measurements

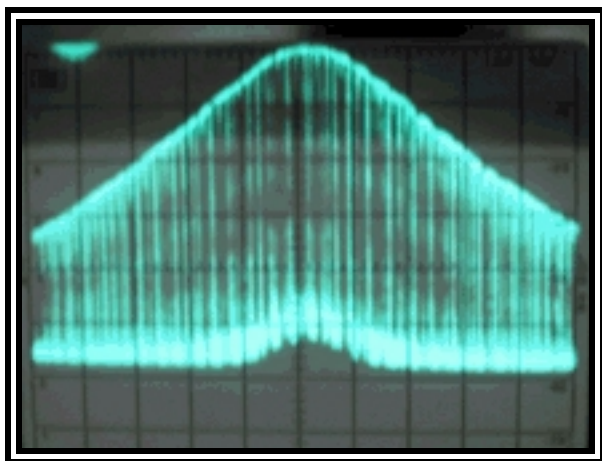
7.3.1. 87.139(h) Emissions Limitations

Test conditions

Temperature	Nominal (23°C)
Power Supply	Nominal (batteries)
Antenna	Nominal (embedded dipole)



I.F.	100 Hz
Video Filter	Off
Scan Time	100 msec./div.
Amplitude	10dB/div.
Scan width	20 KHz/div.
Frequency	121.3751 MHz



I.F.	100 KHz
Video Filter	Off
Scan Time	5 msec./div.
Amplitude	10dB/div.
Scan width	200 KHz/div.
Frequency	121.3751 MHz

Authorized bandwidth : ± 25 KHz

Fo	Fo + (BW x 50%)	Fo - (BW x 50%)	Fo + (BW x 100%)	Fo - (BW x 100%)
Measured	- 41 dBc	- 45 dBc	- 54 dBc	- 54 dBc
Required	- 25 dBc	- 25 dBc	- 30 dBc	- 30 dBc

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